

THE CONDOR

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Ornithology



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July-August, 1905

Number 4



COOPER ORNITHOLOGICAL CLUB

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"THE FIRST OUTING": YOUNG BUSH-TITS BESIDE NEST

Photographed by Herman T. Bohlman

THE CONDOR A MAGAZINE OF WESTERN ORNITHOLOGY.



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A Study in Bird Confidence

BY WILLIAM LOVELL FINLEY

WITH PHOTOGRAPHS BY HERMAN T. BOHLMAN

I LAY on my back under the hemlock and marvelled at the little mansion hanging in the glint of the warm June sun. Yes, a real bird mansion; not open-roofed for impudent passers-by to spy out family secrets; not set in a crotch so it could be tipped over or blown out, but carefully tied, cradle-like, to the drooping branches.

It is not an easy matter to get a site suited for a bush-tit's mansion. There should be one or two firm upright twigs, about which to weave the walls, a cross branch or two for rafters, and, if the house is to be modern, a little support for a porch or promenade. Contrary to our first maxim of architectural success, these little builders begin at the top and build down. Each is the architect of his own home and each is a born master-builder.

Once I found a bush-tit's nest twenty inches long. The little weavers had started their home on a limb and apparently it was not low enough to suit them, for they wove a fibrous strap ten inches long and then swung their gourd-shaped nest to that, so that it hung in a tussock of willow leaves.

We happened to find the nest in the hemlock when they were putting in the first spider-web cross-beams and supports. It took days to furnish the home. At first we were put in the same category with small boys and sparrow hawks. They wouldn't go near the nest for fear we would see it. But a titmouse might make twenty resolutions not to trust and the very next minute he'd throw himself and all his hopes right into your arms. There wasn't a bit of suspicion in his little body, but his race had suffered so long that a good bit of caution had been embedded in his tiny brain.

I stood almost within reach of the nest. The little lover looked me over from all sides. Then, as a final test, he popped right into the round door. He knew I would make a grab at him nest and all. He was out in a twinkling. He looked amazed, for I didn't move. That was his test of friendship, and from that time he gave me his confidence.

Anybody would fall in love with a bush-tit. The fluffy midget does not possess the aerial grace of a swallow, or even the nimbleness of a warbler. He bustles along in such a jerky way, he often looks as if he would topple heels over head

and go whirling to the ground like a tailless kite. But he is a skilled hunter. He skirmishes every tree and bush. He is not so successful a wing-shot as a flycatcher but he has an eye that few can beat in stalking. He is no mean assistant of the gardener. He is not the kind that hoes a whole garden in a day, cutting off half the new tender shoots, but he is at work early and late and he is constantly at it.

We kept run of bush-tit affairs for several days after the young had hatched. The father fed the nestlings as often as the mother. He generally paused on the fern-tops just below the nest. The real drama of life came when the youngsters were fluttering, full-grown, vigorous, impatient to get one glimpse at the outside world from where the mother and father came so often with morsels. We had watched and waited two weeks for this day. The minute one nestling took the idea into his head to get out into the sunshine, it spread like contagion among the whole household. The round door poured out young birds with the rapidity of a Gatling gun shooting in every direction at once, and bullets could hardly be any more difficult than the youngsters were to find.

By watching the parents carefully we finally found several of the young



BUSH-TIT NEST IN WILLOW. PARENT ENTERING TO FEED
YOUNG

bush-tits. They were readily tamed, and we were soon fairly over-run with tit-mouses. They climbed into our camera, and clung to our clothes as easily as a fly walks up a wall. They perched on our fingers and our heads and the parents had such implicit trust in us that they alighted wherever they found their children.

Birds differ only in size and dress from some people, but to one who has studied long and carefully at the homes of different species, each feathered creature has a real character of its own. What does a cut-and-dried catalogue description mean?

Name, *Psaltirparus minimus*, bush-tit. Nest in hemlock tree six feet from ground. Identity, positive. Eggs, seven, pure white, etc. This is all right for a city directory, and is almost as interesting. You don't know a bush-tit any more when you have found him with a field-glass and identified him in your bird manual, than you do a man when you are introduced to him and shove his card in your pocket. Each bird has a real individuality. Each is different in character and disposition. Any careful observer would know the bush-tit and chickadee were cousins, even if they had never heard of the *Paridæ* family.

I found the little family in the hemlock tree even more interesting after they all learned to fly. Several times I saw them about the patch of woods. I observed

many of the same characteristics that Joseph Grinnell tells of in an interesting article in *THE CONDOR* of July-August, 1903. One day I stood watching the flock of midgets in an alder copse. Each youngster had learned to keep



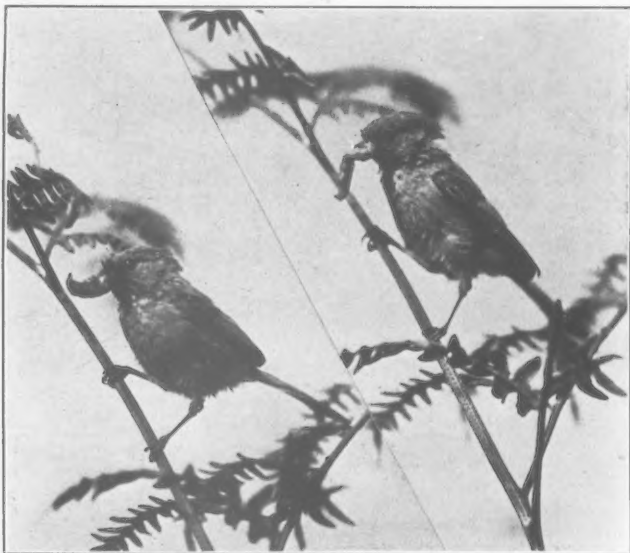
A BIRD IN THE HAND IS WORTH SEVERAL ON THE HAT. A STUDY IN BIRD CONFIDENCE *a*

up a constant "Tscre-e! Tscre-e-e! Tsit! Tscre-e!" as if always saying something, but I do not think this gossip is as much for the sake of the conversation as merely to keep the whole flock constantly together. While I was watching, three or four of the little fellows were within a few feet of me. One of the parents in the next tree began a shrill, quavering whistle, and instantly it was taken up by every one of the band. The two tiny birds near me, as well as every one of the others, froze to their perches as still as death. Had I not known, I couldn't have told just where the whistle was coming from, it sounded so scattering like the elusive grating call of the cicada. Then I saw a hawk sweeping slowly overhead, and the confus-

a Upper figure, Mr. William Lovell Finley; lower figure, Mr. Herman T. Bohlman.—ED.

ing chorus lasted as long as the hawk was in sight, nor did one of the little bush-tits seem to move a feather, but just sat motionless and trilled in perfect unison. It served as a unique method of protection; the whole flock had learned to act as a unit. It would have been hard for an enemy to tell where a single bird was; the alarm note was so scattering, they were so quiet, and their clothing harmonized so perfectly with the shadows of the foliage.

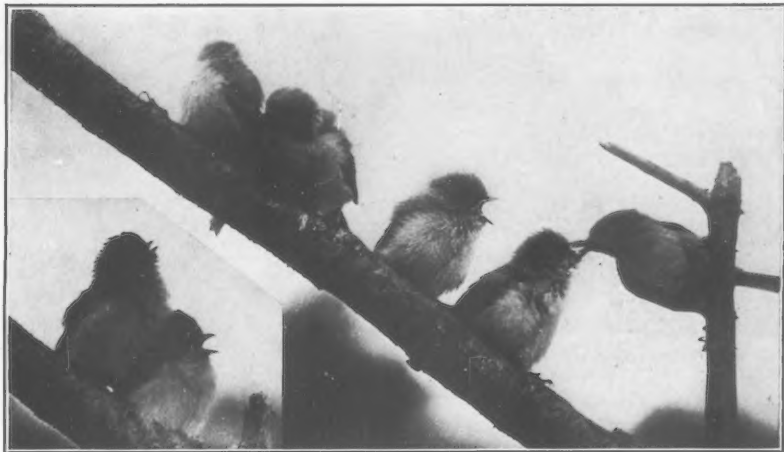
Millions of destructive insects lay their eggs, live and multiply in the buds and bark of trees, and it seems to be the bush-tit's life work to keep this horde of insects in check. After the little family left their home, I never found them quiet for a



PARENTS BRINGING CUT-WORMS TO YOUNG: TWO PHOTOGRAPHS

minute. When they took possession of a tree, they took it by storm. It looked as if it had suddenly grown wings, and every limb was alive. They turned every leaf, looked into every cranny, and scratched up the moss and lichens. They hung by their toes to peek into every bud, they swung around the branches to pry into every crack, then, in a few moments, they tilted off to the next tree to continue the hunt.

Portland, Oregon.



PARENT FEEDING YOUNG BUSH-TITS

The Future Problems and Aims of Ornithology^a

A LETTER FROM MR. WILLIAM BREWSTER

Cambridge, Mass., Feb. 19, 1905.

DEAR MR. FISHER:

Your questions are so comprehensive and far reaching that I cannot answer all of them without giving more time and thought to the matter than are at present at my disposal. I will say briefly, however: (1) That of the more general problems in ornithology not related to any one country, that concerning the interrelation of bird with other animal life—and with plant life—seems to me to be best worth the attention of young ornithologists. By this I mean to say that what is called the "balance of nature" should be more closely studied. The subject is at present veiled in obscurity. We know for example that herons, kingfishers and loons eat fish; but just what fish do they eat, and upon what do these fish subsist? If on other animal life, what do these other animals eat? Do not the kingfishers and herons eat creatures other than fish? etc.

The study of bird migration is another general problem that is not likely to be exhausted for many years to come.

(2.) With reference to North American birds it is especially desirable to know more definitely where certain of them do or do not go to spend the winter. The summer distribution of many of them is also but imperfectly known. An especial

^aA continuation of the series of letters begun in the last issue of THE CONDOR. Mr. Brewster has taken up several specific questions. The answers sufficiently indicate the nature of the questions.—ED.

need—at least from the standpoint of ornithologists living in the eastern states—is that of more exact and definite published descriptions of the songs and other vocal notes of many of the birds which inhabit the Rocky Mountains, the Sierras, and even the coast region of California. This is a difficult matter to deal with effectively. It should be undertaken only by those who have a gift for rendering or describing bird sounds and who are also familiar with the songs of eastern birds, with which comparisons should be made whenever possible.

There are of course many special problems under this head which require further elucidation, such as the nesting of the Carolina parrot and the precise character of interrelationship of the eastern warblers, *Helminthophila pinus*, *H. chrysoptera*, *H. leucobronchialis* and *H. lawrencei*.

(3.) For the young ornithologist of limited means and sedentary habits, no more fitting and useful task can be suggested than the careful and prolonged study of the birds found in the immediate neighborhood of his home. He should begin by making a collection of the birds and their nests and eggs, limiting himself strictly to species taken within a definite and not too extensive area such as that of a township, or at most, a county. Local collections of this kind are of great and permanent value. When there is one for every county of every state in the Union the distribution of the birds of the United States can be plotted with reasonable accuracy. If the general region where our local collector lives has been already carefully worked, he should be content to take only a few specimens of each species; but if it has not been thus investigated, he will do well to collect his birds in series.

(4.) Although I sympathize strongly with the work of the Audubon Societies I do not think that the time has arrived when we can dispense with the killing of birds for scientific purposes. I also hold strongly to the conviction that few if any men can become thoroughly efficient and trustworthy ornithologists unless they have first had extensive field experience as collectors of birds and eggs. This I consider essential to success, no matter what department of ornithology the young student may finally decide to investigate. Of course he may derive much pleasure and profit from merely watching living birds, and he may also make field observations which, if published, will be generally accepted as reliable and of value provided he avoid the mistake—all too common among young men of the present day—of attempting to positively identify by sight alone birds which no one save an expert should venture to name without the aid of a gun. But should he try to deal with any really broad and difficult problems he will be likely sooner or later to find himself seriously handicapped unless he has had previous field experience which has included the killing and dissection of a considerable number and variety of birds.

To this I would add, however, that no young man is justified in thus taking bird life unless he is reasonably sure that his interest in ornithology is likely to be lasting, and that his ability to devote his life to its pursuit is also assured. If he wishes merely to divert himself by the study of birds, or to make their study simply an excuse for leading an out-of-door life, the opera glass, not the gun, is the implement best suited to his use.

Yours sincerely,

[Signed]

WILLIAM BREWSTER.

Scraps from an Owl Table

BY VERNON BAILEY

A pair of great horned owls raised their young in a niche near the top of a cliff, at the western base of the Davis Mountains, Texas, in the summer of 1902, but when I found the nest on August 12 it was empty. I learned at the ranch just around the corner of the cliff that one of the old owls had been killed a short time before my arrival and that several loads of shot had been fired at other members of the family for fear they might catch the chickens. There were at least two of the young owls which were full grown and strong fliers, for I often scared them out of the dark niches or little caves in the neighboring cliffs during the day, but they evidently lacked experience in catching their own meat, for their nightly screams from cliff and fence post had a hungry insistence. It would have kept one old bird hustling to feed the family, even in this open, half desert country of abundant small game had the youngsters done no hunting for themselves, but they were trying to make an honest living, judging by their prolonged screams from the fence posts down by the alfalfa patch.

But for the point of my story I must return to the nest, or to the ground at the base of the cliff forty feet below the old nest cave. There were a few pellets, a quantity of disintegrated pellet material, and nearly a bushel, at a rough estimate, of small bones scattered over the ground. Much of the material had been washed down the steep slope and mixed with the stones and earth and lost, but enough remained to show what had been the principal food of the family during the spring and early summer.

For an hour I dug in this debris, picking out parts of bones that I could recognize or that could be identified later, and making a rough census of the contents of the mass. Identifications and estimates of numbers were based mainly on skulls or parts of skulls with teeth, and in most cases were not difficult. The most abundant bones were those of the cottontail (*Lepus a. minor*) of which I recognized parts of fully 100 skulls. A few jack rabbit jaws and teeth were found, but mostly those of young or half grown animals. Skulls or parts of skulls of about twenty pocket gophers (*Cratogeomys castanops*) were found. Two species of wood rats (*Neotoma micropus*) and *albigula*) and the large kangaroo rat (*Dipodomys spectabilis*) were well represented by broken skulls. There were a few pocket mice (*Perognathus*), including two species. White-footed and grasshopper mice (*Peromyscus* and *Onychomys*) skulls were common, and I found jaws of two little spotted skunks (*Spilogale*) and skulls of two bats. Bones of horned toads and snakes were common and the legs and shells of beetles, grasshoppers, and various insects were abundant in the mass. I found one sternum of a bird the size of a meadowlark and one lower mandible that was probably from a chicken.

The ranch was typical of the west Texas cattle country, stretching down from the base of the mountains over beautiful grassy slopes to the next ranch six miles below. There was not even a garden, but a small peach orchard loaded with fine fruit surrounded the windmill pond, and about three acres of alfalfa just below the pond yielded one or two crops a year. The pocket gophers were common in both peach orchard and alfalfa patch but I could find none on the drier upland. But for the owls it is doubtful if either peach trees or alfalfa would ever have yielded a crop, while mice, rats, and rabbits would have been present in troublesome abundance.

The ranchman admitted that only one or two chickens had disappeared during the summer, but even then he could not get over the idea that owls lived on chickens and were his enemies.

Washington, D. C.

Notes on the Bohemian Waxwing

BY REV. S. H. GOODWIN

IT is the lamented Frank Bolles, I think, who has somewhere called attention to the resemblances that may be traced between birds and men. Among our feathered kin-folk he finds the farmer, the artizan, the mariner, the fisherman, the preacher, the auctioneer, the dancing-master, the confidence-man, the pick-pocket, the scoundrel, and others whose habits or modes of life afford a suggestive, if somewhat fanciful means of classification. Cedar birds on account of the military precision with which their companies and battalions execute certain maneuvers, find their counterpart in the gay soldiery of the parade ground. Doubtless the writer referred to would include in the dashing cohorts of this division, the cedar bird's more distinguished and interesting cousin, the Bohemian waxwing (*Ampelis garrulus*). If, however, we are to take into account some of the chief characteristics of this bird it will not be difficult more fittingly to place him in a list of "representative birds." His trim, neat, well-dressed figure, his pleasing, dignified bearing, his gentle peace-loving disposition, his gracious, courtly manners and other admirable traits of character leave no room for doubt concerning the class he represents. He stands for the well-bred, cultured, considerate man—the man of large nature, noble instincts, and high ideals—he is the "gentleman in feathers."

In appearance, the Bohemian waxwing is decidedly prepossessing. He is always faultlessly attired, the prevailing colors of his suit being quiet shades of brown and gray, relieved by a few deft touches of brighter hues. Especially dainty are the small, wax-like dots which form a narrow sash of scarlet across each wing, this being succeeded by a bar of white, and that by one of yellow. The tail, above, shades from a delicate steel blue, through black, and is terminated by a broader band of yellow. The crest, accentuated by the black bridle at its base, which passes through the eye and meets on the upper portion of the head, gives a distinguished air to this bird. The voice of our "gentleman in feathers" is in perfect accord with his appearance and character. There is nothing harsh or boisterous in his notes; he does not shout to attract the attention of the neighborhood, but, like all gentle folk, expresses his feelings and opinions in quiet, well-modulated tones. To me there is something peculiarly pleasing and sweet in this waxwing's notes, due, largely, to what may be termed their elusive quality. When the bird is quite near its call sometimes sounds

"Far off and faint, and melting into air,
Yet not to be mistaken."

As the first part of their name indicates, the movements of these birds are not easy to forecast. A flock will appear in a given locality during a certain season, remain till the food supply is exhausted, or some instinct of their vagrant nature bids them move on, when they will disappear—possibly not to return for several years—without any formal leave-taking, and with no member of the company left behind to explain the abruptness of their departure, or to inform waiting friends of their whereabouts. So far as I am aware, this is the only trait which is not in perfect accord with the "character" I have given them, and for this the waxwings are not responsible; their movements are determined by a law—"a migration memory," according to Maurice Thompson—to which these birds have been subject through countless generations.

The Bohemian waxwings come into this part of Utah (Provo, Utah Co.) early in December and remain till the last of March, and first week of April. When they first arrive, they usually remain in the tops of the tallest poplars that line our city

streets and they are encouraged to keep well above the ground by the small boy—to whom they are known as “cedar quails”—who hunts them with his vicious “flipper.” Later in the season, however, they come lower. Three years ago on several occasions numbers of these birds fed on crab apples that had been buried by the snow in our front yard. As the snow melted, leaving the apples in sight, the birds ate them with great relish. Many times during the winter just past, waxwings have come into our back yard and fed on the apples which were left on the trees for just such visitors. As I write these words, a flock of thirty-five waxwings are feeding in the apple trees, less than two rods from my study window. There must be something about these apples that produces thirst, for the birds will feed for a time, and then drop down to the irrigating ditch nearby, drink, and return to the apples. Back and forth they fly—from food to water—many times in the course of a half hour. Nor are these birds restricted to dried up apples, seeds of locust trees, and tender buds of the poplar trees. Not infrequently during the sunny days of winter, I have seen these “chatterers” dash out from fifty to a hundred feet from the tree tops where they were congregated, and return directly to the point of departure. On such occasions, one after another—a half dozen or a dozen at a time—will dart out and up, with the rapid wing stroke and straight flight of the kingbird, snap up the insect of which they were in pursuit and return to their places in the poplars. Usually, unless the chase carried them too far from the starting point, they describe a graceful circle and sail back to the tree, in this respect also reminding one of the kingbird. Upon the return of these hunters to the tree they never failed to receive from their waiting comrades, “burring” words of commendation, elicited, no doubt, by their cleverness and success. I have seen the cedar bird in New England, late in August, indulging its flycatching proclivities, but to find its rare and beautiful relative doing the same thing in Utah, in January, was a novel experience to me.

The Bohemian waxwings are gregarious; they move about only in flocks, large or small, save in breeding time. I have seen flocks, here in the city, numbering from 150 to 300 birds. On one of the coldest days of the winter of 1903-'04 I happened upon a flock, which occupied the tops of several poplars, and in which there were nearly 320 birds. Often fifty to one hundred are to be seen. Toward spring, they seem to break up into smaller flocks. When one of the larger flocks takes possession of the bare tops of some of our tall poplars, and are seen from a distance, the birds appear like some strange “slugs” clinging to the branches.

These birds are of a quiet, gentle disposition and appear to be possessed of the instincts, tastes, and refinement which always characterize well-bred folk. They love the society of their kind—and soon learn to know their human friends—and are sociable and well disposed in their relations one with another. When not feeding, they sit quietly, all facing one direction, and appear to be looking about them, as if in intelligent appreciation and enjoyment of their surroundings. They never indulge in unseemly squabbles, and, with rare exceptions, always conduct themselves with dignity and propriety. In fact, their politeness, and seeming consideration of one another is really remarkable, surpassing in these respects, the cedar bird. In this connection is suggested the rather amusing statement, made by at least two writers on ornithological subjects, concerning the cedar bird. Neltje Blanchan, in “Bird Neighbors,” quotes Nuttall as saying that he “has often seen them (cedar birds) passing a worm from one to another down a whole row of beaks and back again before it was finally eaten.” Wm. Rogers Lord, in his “A First Book upon the Birds of Oregon and Washington,” evidently following the writer just quoted, uses almost precisely the same language, making Nuttall responsible for this incident. The only trouble with these statements is that they

are not true! Nuttall says nothing of the kind. He *does* say, "an eyewitness assures me that he has seen" this take place—which is a very different matter. Nuttall does not commit himself! On several occasions I have seen a young or inconsiderate waxwing demand the apple from which a comrade was feeding, and the bird thus deprived of his rights moved aside with no indication of either haste or fear, and, from a nearby twig, looked on in silence, as though all the apples in the county were not worth a display of temper, or a breach of waxwing etiquette. Often in the course of my observations, I have met with incidents which led me to feel that the basis of the waxwing's code of morals is not unlike the injunction—slightly modified—of him who said "Render to no creature evil for evil." Certainly our "gentleman in feathers" is not to be placed with those who say, "I will do so to him as he has done to me, and more also." Several years ago I was greatly interested in noting the unfailing good humor, and remarkable self-restraint under great provocation, exhibited by a small flock of waxwings that was feeding in an apple tree. For some reason best known to himself, a robin was making himself particularly obnoxious to these quiet well-behaved birds. In a loud, harsh voice, the tones of which were made more shrill by the anger which seemed completely to master him, he severely berated the inoffensive waxwings. He would bluster and scream out his denunciations till he seemed unable longer to restrain himself when, to all appearances, absolutely beside himself with rage because the objects of his wrath paid no attention to his railings, he did the catapult act—hurling himself straight at the intruders. Several of the waxwings, in order to avoid an actual collision, left the places where they were feeding, and alighting on twigs nearby paused for a moment, as if to observe the antics of the furious robin, when they would resume their feeding. Their indifference to the loud, bullying protests of the robin, and their persistence in remaining on the premises after he had ordered them off, so exasperated Mr. Redbreast that with screams of defiance he dashed from group to group without stopping to alight until, exhausted quite as much by the heat of anger as by the unusual exertions he was making, he was glad to drop on a branch and pant for breath. When the robin came directly at them, the waxwings would give way and fly a few feet and alight in the same tree, so that when their enraged assailant had gone the rounds and had tired himself out in a vain attempt to drive them away, they were feeding as quietly and unconcernedly as before. The robin showed pluck, and a determination that was worthy of a better cause, for no sooner had he recovered his breath than he would renew the attack. But each time he was met by the same tactics, the same good nature and dignified silence and indifference which, in view of his excited condition, must have been extremely exasperating to him.

While the breeding grounds of these birds are far to the north, Utah has a fairly well established record of their nesting within her borders. On June 26, 1904, Robert G. Bee of this city found a Bohemian waxwing nesting six miles east of Sunnyside. The nest was in a low bush on the side hill, the eggs but slightly incubated. Mr. Bee, who for some years has collected "singles", took one egg, and that egg lies before me as I write. Rev. Mr. Martin, of Manti, this State, reports finding the nest of this waxwing at Springville, Utah, four years ago, and another nest of the same species in Six-mile Canyon, in the summer of '04, but as he took neither eggs nor bird, his records have practically no value.

Many interesting birds spend the winter with us, but a seven years' acquaintance with the Bohemian waxwing leads me to feel that among our winter birds there is none quite so attractive to me as this well dressed, genial, lovable, aristocrat and gentlemen in feathers.

Provo City, Utah.

Midwinter Birds on the Mojave Desert

BY JOSEPH MAILLIARD AND JOSEPH GRINNELL

(Concluded from page 77)

Vireo huttoni. Hutton Vireo. A single specimen was secured by Taylor on December 28. This was doubtless a winter visitant from the San Diegan district to the southwards.

Helminthophila celata. Orange-crowned Warbler. Two examples, ♂ and ♀, were taken by Mailliard on Dec. 22 and 29, respectively. (Nos. 6109 and 6234, Coll. J. & J. W. M.) Apparently similar birds were seen by the other members of the party. This would seem to show that the orange-crowned warbler is something more than a mere straggler. This eastern race may prove to be a regular winter visitant in southeastern California.

Dendroica auduboni. Audubon Warbler. Fairly common in the river bottom.

Geothlypis trichas occidentalis. Western Yellow-throat. A male specimen (No. 6256, Coll. J. & J. W. M.), collected Dec. 31 from a tule patch near the river, seems best referable to *occidentalis*, on account of large size and less brownish shading laterally and dorsally. But one other yellow-throat was seen.

Anthus pensilvanicus. American Pipit. Numerous in flocks on the pasture lands along the river.

Oroscoptes montanus. Sage Thrasher. Unexpectedly rare. But one was discovered. This was shot from a cottonwood near the station by Mailliard.

Mimus polyglottos leucopterus. Western Mockingbird. A very few were found in the river bottom.

Toxostoma lecontei. Leconte Thrasher. Scarce and only noted back from the river on the sandy reaches of the desert. But one specimen was secured.

Heleodytes brunneicapillus couesi. Cactus Wren. A few cactus wrens were met with among the tree yuccas on the desert two miles west of Victorville.

Salpinctes obsoletus. Rock Wren. Common almost everywhere except among the cottonwoods.

Thryomanes bewicki drymæcus. San Joaquin Wren. Common in the river bottom. All of nine specimens secured seem to be representative of the race breeding in the San Joaquin-Sacramento Valley, as described by Oberholser (Proc. N. S. N. M. XXI, 1898, 437). As regards intensity of dorsal rufescence, they are about intermediate between *charienturus* and *spilurus*. This form is doubtless here a winter visitant from the northwestward. A specimen of the same subspecies has been previously recorded from Barstow in midwinter. (Grinnell, CONDOR III, May 1901, 70.)

Troglodytes aedon aztecus. Western House Wren. A ♂ (No. 6216, Coll. J. & J. W. M.) taken by Mailliard Dec. 28, and the only one of the species detected by any of the party, is remarkably different from *parkmani* in its drab-gray caste of coloration. In fact there is scarcely a tinge of rufescent, even on the rump. This individual was probably a visitant from the Great Basin region to the northward.

Telmatodytes palustris plesius. Western Marsh Wren. Fairly common about the alfalfa patch previously mentioned. All of the six skins secured by the party show the large size and pale coloration of the Great Basin race, *plesius*.

Certhia americana montana. Rocky Mountain Creeper. Fairly common in the cottonwoods along the river. The three skins taken all have the large measurements, broad dorsal white streaking, and pale browns characteristic of the

Rocky Mountain form. They are readily distinguishable from *zelotes*, the breeding bird of the Sierras. *Montana* is probably a winter visitant, therefore, to southeastern California from the northeastward.

Sitta carolinensis aculeata. Slender-billed Nuthatch. Fairly common among the cottonwoods.

Parus gambeli. Mountain Chickadee. Common in the brush and cottonwoods of the river bottom.

Psaltiriparus minimus. California Bush-Tit. Fairly common along the river. The specimens secured are quite like those of the southern coast district of California, and these in turn do not present tangible differences from Oregon skins of the same season.

Auriparus flaviceps. Verdin. One specimen, secured by Dixon, was the only one met with. We found no mesquites in the vicinity of Victorville, and this evidently accounts for the absence of verdins. For farther down the Mojave River, at Barstow, both mesquites and verdins are plentiful.

Regulus calendula cineraceus. Ashy Kinglet. Fairly common, mostly along the wooded bottom lands. But several were met with among "sage" bushes out on the desert. All the skins secured show large size, and grayness of coloration conspicuous anteriorly. (See CONDOR VI, Jan. 1904, 25.)

Myadestes townsendi. Townsend Solitaire. Solitaires were fairly numerous among the cottonwoods, where they were feeding on mistletoe berries.

Hylocichla guttata nana. Dwarf Hermit Thrush. One specimen was taken by Pinger near the river.

Merula migratoria propinqua. Western Robin. Fairly common among the cottonwoods, where they were feeding on the mistletoe berries.

Sialia mexicana occidentalis. Western Bluebird. Abundant along the river bottom where they were feeding largely on mistletoe berries.

Sialia arctica. Mountain Bluebird. Two flocks were encountered out on the desert quite a distance from the river.

The Sage Grouse, *Centrocercus urophasianus*

BY L. E. BURNETT^a

EDITED BY S. ARTHUR JOHNSON

I HAVE had the pleasure of giving the sage grouse considerable attention, for, owing to my residence where the species is very numerous, I have been enabled to observe the birds at all times of the year. It is worth a long trip to see the male in full plumage at mating season. His striking dress and yellow air-

^aThe author of this sketch was born in Luray, Missouri. His family moved to Colorado when he was a mere lad and settled near Loveland. After a residence there of several years they took up life on a ranch not far from Little Medicine, Wyoming, which was his home until his death. From early childhood Mr. Burnett was a passionate lover of animal life. He was much in the field and sought many times to tame his wild friends. One fall he had seven young antelope in captivity, but the experiment proved a failure owing to lack of proper diet.

Life in Wyoming gave him ample opportunity for observation and, by familiarizing himself with the best literature, he became imbued with the scientific spirit. In order that he might collect and preserve, he learned the art of taxidermy and attained usual proficiency in that line. He strove always for expression in his work, and secured results through his large knowledge of wild life.

The greater part of the last two years of his life was spent in collecting and mounting material for the museum of the Colorado Agricultural College. It was while living here that a severe attack of his lifelong enemy, asthma, took him from us. From boyhood he struggled with a body weakened by chronic pulmonary troubles. His ambition and love of his work often led him beyond the limits of his strength. His cheerful disposition and kindly attitude endeared him to all with whom he came in contact. Following plans laid by himself, his valuable private collection was presented to the public library of Fort Collins, Colorado.—S. A. J.

galls (see accompanying illustration) render him one of our handsomest game birds. By the first of December one can find the starting frills and the young pin feathers of white that border the galls and front of throat. The frills start from the sides of the neck and vary in number and length. They are pencil like, the point being armed by a little brush which is slightly curved at the tip. When the bird is traveling or at ease the plumes are flattened against the shoulder, but if frightened, he usually runs with these partly erected with the other feathers of the head and neck. The young males (sometimes called bulls) are not so dark or well frilled as the old, but rather frosted. The throats of the old males are also darker.

I have heard them drum as early as December. This performance is most often observed where hundreds of males and females have congregated together, a custom which they have in the fall of the year. By February the males are all drumming, but this is not continued during bad weather which closes the session until fair weather returns. By the latter part of the month the males are in full dress. Their protracted meetings last until the first days of May. After the violets and buttercups have come and the song of the sage thrush begins, their drumming is heard but occasionally. Their costume is becoming shabby and soiled, not so presentable. By the balmy June days, they have lost most of their frills, and the breast is dirty and worn from rolling in the dust and stretching on the ground in birding. They are credited with soiling the breast while drumming, but I have never observed this to be one of the causes during my entire fifteen years with them. When drumming they stand very erect, holding the wings away from the sides and nearly perpendicularly, while the large loose skin of the neck is worked up, and the head drawn in and out until the white feathers are brought to the chin. At the same time the galls are filled with air until the birds look as if they were carrying snowballs on their shoulders. Then the skin which lies between the galls is drawn in with a sucking movement, thus bringing the galls together or nearly so. With this action the air is expelled from the throat producing the noise, which is hard to mimic and which resembles that of an old pump just within hearing distance. The first sound is that of a low "punk" the next "de," followed by the highest, "punk punk," and is made without movement of the wings. After the bird has accomplished this feat he walks away a few paces either in a straight line or a circle, with wings down, hanging loosely, but not grating on the ground. At times they do drag the wings as they strut along with tail spread and erect, though not so perpendicular as that of a turkey. Again they will dance about with all the pomp of a male pigeon.

Their courts are generally in very conspicuous places, being either on some barren flat or moraine where they may be seen from a distance. The males, yearlings, and old are social and congregate at these places in bunches comprising from twenty-five to a hundred or more. These birds do not mate, so far as I have been able to learn, but the females come to these courts from all quarters at about sundown or early in the morning. At such times by patient watching one may see a hen coming in in very rapid flight. The wing motion is composed of from three to five strokes with soaring between. At the first rising from the ground the flight of the males is rather laborious, but after a start is made it is rapid and graceful. At the drumming period the males are very jealous and many fights, some of which are quite serious, take place. The fight consists in one bird seizing another by the head, neck, or jacket and pulling and beating with the wings. Its duration is very brief, one or the other giving in. After the session on the bird-

ing grounds, the males fly away to their home in the sage until time again calls them to drill.

In April many of the females are setting while others have found suitable locations. The courts are not so popular now for the males fail to attract attention. Soon after this the session is brought to a close. The females nest in the parks and valleys usually near some spring or rivulet, though there are exceptions to this rule. One must look closely, for the old bird will permit herself to be almost trampled upon before she will disclose the secret of her treasures. On being disturbed the hen will usually forsake her nest and seek a location elsewhere. The nest is poorly constructed, consisting of a shallow depression under a sage



MALE SAGE GROUSE IN NUPTIAL PLUMAGE
(Mounted by L. E. Burnett)

bush, lined with blades of grass and a few of the bird's own feathers. The hens lay from six to nine and occasionally ten eggs. These are a dirty olive buff heavily blotched with Vandyke brown. Badgers and coyotes destroy many nests while eagles are an important enemy.

The young are like little turkeys in color and peep similarly. They leave the nest immediately upon hatching. Attempts to raise them have always failed, though I have secured the very young and put them with hens. The young will tolerate no foster mother, but escape from the pen, if possible, and wander away uttering their plaintive little whistle "ra-do-ra-do." I believe that they might be reared if one had a turkey brood in a patch of alfalfa where the chicks would feel more at home and be able to eat the food of their choice.

The actions of a sage hen with a brood remind one of a turkey. The presence of the

brood is often made evident by the actions of the mother which are wild and foolish. In these circumstances one must be very careful lest he tramp on the chicks for they are much the color of the ground upon which they lie very closely. After considerable clucking and muttering the mother will wander off some distance and watch and listen for a signal of distress. If one whistles the notes of a little one in distress it will throw her into spasms of excitement. She will act as if injured in both wings and body as she flutters around uttering a clucking noise. By November the young equal the old in size, but the color is not so dark—more of a light brownish. The young feed upon insects, but from November till spring the birds are forced to live upon sage, which strongly taints the meat.

When riding in the spring and summer I have often seen single hens and

sometimes bunches of them. They were always bright and in good condition of flesh. They appeared to be idle which leads me to think that the late hatches do not lay the following spring. If this were to be seen only in summer I would believe that they had been robbed of their possessions, but it occurs when the hens should be nesting.

The counties of Albany, Converse, Natrona, and Carbon are the places where grouse are most abundant in Wyoming. A single hunter has been known to kill a hundred birds in a day without a dog. The best hunting is found over lands adjacent to springs, down green draws and the bottoms along streams, and the best time to find coveys is in the morning or evening when the birds are feeding. After feeding they hide either on the feeding ground or at some distance from it where the sage is large enough to screen them from enemies and the rays of the sun. Ofttimes a hen with her brood will venture to take refuge in the shade of a ranchman's cabin or barn. It is certain that grouse breed above seven thousand feet but just how much I am unable to say. Hail storms often kill large numbers when they strike the places of hiding. When their feathers are drenched with rain, the birds are often unable to rise, and at such times have been killed with a stick.

Birds from the West Coast of Lower California and Adjacent Islands

BY HENRY B. KAEDING

IT was the writer's privilege during the summer of 1897 to form one of a party that visited the islands off the west coast of Lower California. This expedition was made in a small schooner, leaving San Diego during the first week in March, and an endeavor was made to touch at all the islands between San Diego and Socorro Island, with the exception of Los Coronados. This was done, some of the more important islands being visited twice and even three times, and landings were also made on the mainland of the Lower California peninsula. Many interesting facts were brought to light concerning the breeding habits of little known shearwaters and petrels and several new species of birds were described from the material collected.

The ornithological material was for the collection of Mr. A. W. Anthony, who has written at length on the results of the expedition (see list of references appended), but as yet there has been no attempt to compile a complete list of the birds encountered on the trip. The following list is intended to furnish in as concise form as possible a complete hand-list of the birds taken or noted by the writer. Obviously it cannot be expected that a list of this kind will embody all the birds of the region visited, and for additional information on the avifauna of the region in question the writer has appended a list of the principal publications pertaining to the subject. With regard to this list of publications, it may be as well to state that no attempt has been made to compile a *complete* bibliography; this has been done by Mr. Brewster^a and others, and the list of references appended is one of only the principal and leading publications on the subject; a bibliography of this region will be found in several of the works referred to.

Prior to the time of the visit of our party, the more southerly group of islands, Los Revillagigedos, comprising Socorro, San Benedicte and Clarion Islands, had

a. Cf. Brewster, Birds of the Cape Region of Lower California. Bull. Harv. Mus. Comp. Zool., XLI, 1902.

been visited once only by an ornithologist since 1867,^a that once being by Mr. C. H. Townsend in 1889,^b at which time a limited period only was spent on the islands and the meagre knowledge of the avifauna that was obtained, important as it was, served only to whet the interest of all western ornithologists. Since 1897 several expeditions have touched at these islands en route to and from the Galapagos group, and one expedition was sent to Los Revillagigedos by the California Academy of Sciences in 1903. This party spent several months in the region, principally upon Socorro Island, and the report of their work, when published, will undoubtedly add much to the history of the group.

Most of the islands along the coast-line of Lower California were at one time an integral part of the mainland. San Martin Island, however, is undoubtedly of volcanic origin and of comparatively recent eruption, the lava blocks being sharp and clean-cut on the edges. Guadalupe also is of volcanic origin but is older than San Martin, the lava on Guadalupe being well weather-worn. Cerros Island, while at one time part of the mainland, shows traces of volcanic disruption in the torsion of the strata, but no direct eruptive evidences were seen. Socorro and San Benedicte Islands, however, are strikingly volcanic, the former being in reality an active volcano, while San Benedicte is a vast heap of broken lava, pumice, tufa, ashes and obsidian. San Benedicte has but little vegetation, that little being mainly grasses, but on Socorro soil has formed and the island is a dense growth of cactus, grasses, vines, shrubs and even large trees; this, taken together with the extensive and peculiar avifauna, shows the great age of Socorro as compared with San Benedicte. Clarion Island, also, owes its origin to volcanic sources and to the subsequent action of the corals which have surrounded the island with reefs. The vegetation on Clarion is dense and consists principally of cactus; on some portions of the island a tree (*Dodonaea viscosa* L.) is abundant, and it is on the tops of these trees that the boobies (*Sula piscatrix websteri*) nest by thousands. These trees are undergrown by and interlaced with a network of thorny creepers (*Cæsalpinia bonducella* Roxb.), peculiarly tough and clinging, and these creepers aid the cactus in making locomotion impossible without the aid of a machete to cut a path. These thorn creepers are also a source of great danger to the boobies nesting over them, for if a booby misses alighting on the nest when returning heavy laden with fish, or if in rising the heavy bird falters and drops, the thorny ropes seize him in a grasp that never relaxes; to this we found many a skeleton bearing grim testimony.

The writer regrets exceedingly that lack of time and space prevent his giving to this list the detail it warrants. Much might be written on the curious habits of these little-known species, especially on the breeding habits, many nests and eggs having been found, and of species whose nesting habits were and are unknown to the majority of workers.

Colymbus nigricollis californicus (HEERM.). We saw one individual of this species on San Geronimo Island on March 17th; it is reported commonly from the coast of Lower California in winter.

Cerorhinca monocerata (PALL.). Rhinoceros Auklet. A single specimen was taken near San Geronimo Island about March 9th, 1899.

Ptychoramphus aleuticus (PALL.). Cassin Auklet. This species is common on all the islands as far south as Ascuncion Island, becoming abundant on San Geronimo, San Benitos and Natividad Islands, less common on Todos Santos, San Martin, San Roque, Ascuncion and Cerros Islands; this is probably the most abund-

a. Cf. Grayson, Col. A. J., Exploring Expedition to the Island of Socorro. Proc. Bost. Soc. Nat. Hist., XIV, 1870-71, 287-289.

b. Cf. Townsend, C. H., Birds from the Coast of Western North America and Islands, etc. Proc. U. S. Nat. Mus. XIII, 1890, 131-142.

ant of the breeding sea-birds met with. The single egg is laid in a burrow in the sand, the burrow in certain localities being used in turn by these birds, then by shearwaters and lastly by petrels. Fresh eggs were found as early as March 10th.

Brachyramphus hypoleucus XANTUS. Xantus Murrelet. Fairly common on and about Todos Santos, San Martin, San Geronimo and San Benitos Islands, breeding most accessibly on San Benitos, where in addition to nesting in the cranies in the cliffs the nest is often placed under the foliage of the maguey (*Agave shawi*), on the sandy slopes facing the sea. The eggs, taken March 27th, were slightly incubated. No specimens exhibiting the characters of *Brachyramphus craveri* (SALVAD.) were noted, *craveri* being apparently confined to the Cape region and Gulf of California.^a

Rissa tridactyla pollicaris RIDGW. Pacific Kittiwake. A few individuals noted at San Geronimo Island on March 15th.

Larus glaucescens NAUMANN. Glaucous-winged Gull. Well distributed along the northern islands but not common anywhere; noted on San Martin, Todos Santos and San Geronimo Islands March 10th to 15th, and on Guadalupe Island March 22nd.

Larus occidentalis AUD. Western Gull. Noted on Todos Santos, San Martin, San Geronimo, Guadalupe, San Benitos, Cerros, Natividad, San Roque and Asuncion Islands; common and breeding during the latter part of March and April. This is the only species of the genus found breeding on the trip.

Larus californicus LAWR. California Gull. Noted only at Todos Santos Island, March 10th, where it was not common.

Larus heermanni CASS. Heerman Gull. Common during March on Todos Santos, San Martin, San Geronimo and San Roque Islands, but giving no signs of breeding. This species is apparently common all along the west coast of Lower California during the entire summer, but we found no breeding birds.

Sterna maxima BODD. Royal Tern. Noted at Cerros Island April 1st; at San Juanico Bay June 12th; near San Martin Island in July; apparently fairly common along the coast.

Sterna elegans GAMB. Elegant Tern. A small flock of these truly elegant birds was seen off San Domingo Point on June 14th, and several were taken. They are not uncommon in the mainland lagoons near Magdalena Bay.

Sterna fuliginosa GMEL. Sooty Tern. On a large rock lying a few miles to the northward of Socorro Island this species was found on May 12th breeding in a vast colony, with downy young at this date.

Anous stolidus ridgwayi ANTHONY. Ridgway Noddy. These birds occupied the same rock near Socorro Island as the sooty terns, and were if anything more numerous than the latter, having fresh eggs on May 12th.

Diomedea nigripes AUD. Black-footed Albatross. Common all summer from San Diego south to Cape San Lazaro, both far out at sea and along the coast line; can be caught with a hook and line at almost any time. One was seen near Clarion Island in May.

Diomedea immutabilis ROTHCHILD. Laysan Albatross. One specimen was taken between Guadalupe and San Martin Islands on March 19th.

Puffinus creatopus COUES. Pink-footed Shearwater. Common off San Domingo Point on June 14th.

Puffinus opisthomelas COUES. Black-vented Shearwater. Common about San Martin Island March 12th; on Guadalupe Island March 22nd, breeding; on San Benito Island March 27th, breeding; on Natividad Island, April 10th, breeding in a

a. Cf. Brewster, Birds of the Cape Region of Lower California. Bull. Harv. Mus. Comp. Zool., XLI, 1902.

vast colony, with fresh eggs at this date; common off San Domingo and Abrejos Points June 14-17th. This is the most abundant shearwater up and down this coast during the early summer.

— ***Puffinus auricularis*** C. H. TOWNSEND. Townsend Shearwater. This little-known species was found common at sea between Cape St. Lucas and San Benedicte Island during April, May and June, and was found breeding in a large colony on San Benedicte Island on April 30th, with large young at this date; on Clarion Island, May 20th, it was also breeding abundantly, with large young; was common about Socorro Island May 24th; abundant at Cape St. Lucas June 3rd.

— ***Puffinus griseus*** (Gmel.). Dark-bodied Shearwater. Common off San Domingo Point June 14th and off Natividad Island June 30th.

— ***Puffinus cuneatus*** SALVIN. Wedge-tailed Shearwater. This shearwater breeds by thousands on San Benedicte Island, entering the burrows apparently about April 1st. We found them busily occupied on April 30th but without eggs; a second visit to the island on the 18th of May showed in a few places green twigs dragged to the entrance of the burrow, but no eggs, and it was not until the 31st of May, when we visited the island a third time, that we found the first egg of this species. The species is seldom seen about Socorro or Clarion Islands, but was seen as far north as Cape St. Lucas on June 5th.

— ***Puffinus bulleri*** SALVIN. New Zealand Shearwater. A gray shearwater seen near Cape St. Lucas on June 5th which was not taken was conditionally referred to this species.

— ***Halocptena microsoma*** COUES. Least Petrel. This little petrel breeds on San Benitos Islands, rather plentifully in certain spots among the rocks, the eggs being partially incubated on July 14th; was common off San Domingo Point on June 14th; is apparently not seen about the breeding grounds before June 1st.

— ***Oceanodroma kaedingi*** ANTHONY. Kaeding Petrel. This species is to be found from Guadalupe south to Socorro during June and July, but was not seen along the shore line in company with the others of the genus; apparently not seen in these waters before the middle of May. The breeding grounds of this species are as yet unknown, but it is probable that the birds occupy the burrows of the Guadalupe petrels on Guadalupe Island after the breeding season of the former is closed.

— ***Oceanodroma macrodactyla*** (BRYANT). Guadalupe Petrel. This species, peculiar to the immediate vicinity of Guadalupe Island, breeds sparingly on the island, eggs taken on the 25th of March being slightly incubated; the birds may be seen at sea near the island. The breeding habits of this petrel differ materially from the other petrels found breeding in these waters in that they lay their eggs at least 100 days earlier than the others, and also instead of selecting low, sandy or rocky situations for their burrows, are only to be found nesting in burrows at the extreme top of Guadalupe Island, at an altitude of over 4000 feet above sea level, and in pine and cypress groves at that.

— ***Oceanodroma melania*** (BONAP.) Black Petrel. Breeds abundantly on San Benitos Islands, eggs taken July 14th being partially incubated; was common off San Domingo Point on June 14th and near Guadalupe Island on July 25th; appears during May in these waters with the other petrels breeding on the Benitos.

— ***Oceanodroma socorroensis*** C. H. TOWNSEND. Socorro Petrel. This species also breeds abundantly on the San Benito Islands, having eggs partially incubated on the 14th of July. It is to be seen from this point south to Socorro (and beyond?) at this time of year, appearing coincident with the other petrels breeding on the Benitos. It is interesting to note that during the trip south to Socorro Island, prior to May 1st, no petrels were seen except *Oceanodroma macrodactyla* at Guada-

lupe; but after May 1st the least, black, Socorro, and Kaeding petrels appeared, becoming more numerous during June and apparently passing north to the breeding grounds from the regions south of Socorro Island. Mr. Townsend secured but one specimen of *Oceanodroma socorroensis* at Socorro Island and saw very few March 9th,^a so that it is probable that the bulk of the birds were still to the southward at that date. It is interesting to note in this connection that so far as we were able to ascertain, there are no sea birds nesting on Socorro Island at all, with the exception of the terns nesting on the outlying rocks. Mr. Townsend found burrows that he judged would be occupied later by petrels,^a but I am constrained to believe that these were the burrows of the land crabs, which swarm over the island. These crabs are so voracious and bold that it would hardly be possible for even a shearwater to withstand their attacks, and this is probably the reason why, although thousands of shearwaters nest on San Benedicte thirty miles away, none nest on Socorro, there being very few crabs on San Benedicte.

— *Phaethon æthereus* LINN. Red-billed Tropic Bird. Breeds sparingly on San Benedicte Island May and June; seen near Socorro, Clarion and Roca Partida Islands, at sea; seen off Magdalena Bay on June 6th.

— *Phaethon rubricaudus* BODD. Red-tailed Tropic Bird. Known in these waters from the single specimen taken by our party near Guadalupe Island on July 23rd.

— *Sula cyanops* SUND. Blue-faced Booby. Common on San Benedicte and Clarion Islands, breeding; fresh eggs were taken as early as April 30th and as late as June 1st. This booby, as well as *Sula brewsteri* and *Sula piscatrix websteri*, is often seen fishing at Socorro Island, but as far as we could see none of the boobies nest on Socorro.

— *Sula brewsteri* GOSS. Brewster Booby. Brewster booby breeds sparingly on San Benedicte Island, the eggs taken during May being partially incubated. Should *Sula brewsteri nesiotæ* HELLER & SNODGRASS prove tenable, these San Benedicte Island birds may be referable to the latter race.

— *Sula piscatrix websteri* ROTHCHILD. Webster Booby. Webster booby is by far the most numerous of the three boobies nesting on the islands of this group. It nests abundantly on San Benedicte and on Clarion Islands, the nests on the former island being placed on grass hummocks, etc., while on Clarion the majority of the nests are placed on the tops of the low tree (*Dodonæa viscosa* L.) which grows in rather close thickets or groves on certain portions of the island. The eggs are laid during May.

— *Phalacrocorax dilophus albociliatus* RIDGW. Farallone Cormorant. Noted on Todos Santos, San Martin and San Geronimo Islands March 10th to 15th; reported as breeding commonly along this coast from San Diego to the Cape.

— *Phalacrocorax penicillatus* (BRANDT). Brandt Cormorant. Todos Santos, San Martin, San Geronimo and Cerros Islands, March 10th to 31st; breeding range and abundance apparently about the same as that of the Farallone cormorant.

— *Phalacrocorax pelagicus resplendens* (AUD.). Baird Cormorant. Noted only on San Geronimo Island, where a few individuals were seen on March 15th.

— *Pelecanus erythrorhynchos* GMBL. American White Pelican. A small flock of these birds was seen on San Geronimo Island on March 15th.

— *Pelecanus californicus* RIDG. California Brown Pelican. Abundant on San Martin Island March 12th, where it is known to breed.

— *Fregata aquila* LINN. Man-o'-war Bird. The frigate bird breeds commonly on San Benedicte and Clarion Islands, full grown young and fresh eggs (second

^a. Cf. Townsend, Birds from the Coasts of Western North America, etc. Proc. U. S. Nat. Mus., XIII, 1890, 134-5.

sets?) being found during May; seen occasionally off Lower California coast north to San Diego; is known to breed in salt lagoons on the mainland, and also to breed abundantly on Santa Margarita Island at Magdalena Bay.

Merganser serrator LINN. Red-breasted Merganser. Not uncommon along this coast in winter and early spring; we noted several at the northern islands on the trip south.

Aythya affinis (EYT.). Lesser Scaup Duck. A few seen at San Martin Island on March 12th.

Oidemia perspicillata (LINN.). Surf Scoter. A few seen about San Martin Island on March 12th.

Branta nigricans (LAWR.). Black Brant. Several large flocks of these birds were seen about San Martin and San Geronimo Islands on March 12-15. They were very wild and shy, keeping to the outer fringe of kelp.

Ardea herodias LINN. Great Blue Heron. One or two noted; San Martin Island March 12; Clarion Island May 20th; Socorro Island May 10th.

Nyctanassa violacea (LINN.). Yellow-crowned Night Heron. Socorro Island, May 15th; San Benito Island March 25th; not common.

Crymophilus fulicarius (LINN.). Red Phalarope. Seen at sea occasionally during March; on June 3rd, near Cape St. Lucas, a large flock of these birds was seen passing rapidly north.

Actodromas minutilla VIEILL. Least Sandpiper. Rather common in small flocks at San Geronimo Island March 15th, Turtle Bay April 14th and Abrejos Point April 19th.

Pelidna alpina sakhalina (VIEILL.). Red-backed Sandpiper. Several small flocks seen at Abrejos Point April 19th.

Ereunetes occidentalis LAWR. Western Sandpiper. Commonly seen along this coast up to about May 15th.

Calidris arenaria (LINN.). Sanderling. Common in small flocks at San Geronimo Island March 15th and at Abrejos Point April 19th.

Limosa fedoa (LINN.). Marbled Godwit. Fairly common at Turtle Bay April 14th; a few seen at San Geronimo Island March 15th.

Symphemia semipalmata inornata BREWST. Western Willet. Common at Turtle Bay March 14th and at Abrejos Point April 19th.

Heteractitis incanus (GMEL.). WANDERING TATLER. Seen along the beaches at Todos Santos Island March 10th, at San Geronimo Island March 15th, at San Martin Island March 12th, at San Benitos Islands March 27th, at San Roque Island April 16th, at Ascuncion Island April 18th, at San Benedicte Island April 30th, at Socorro Island May 10th, and at Clarion Island May 20th.

Actitis macularia (LINN.). Spotted Sandpiper. Not common; seen at San Geronimo Island March 15th and at Socorro Island May 14th.

Numenius longirostris WILS. Long-billed Curlew. Quite common in flocks at Turtle Bay April 14th.

Numenius hudsonicus LATH. Hudsonian Curlew. San Geronimo Island March 15th; common at Turtle Bay April 14th.

Charadrius squatarola (LINN.). Black-bellied Plover. San Geronimo Island March 15th; quite common at Turtle Bay. April 14th, moving in large flocks.

Charadrius dominicus MUELL. American Golden Plover. One specimen taken on Clarion Island May 21st.

Ægialitis nivosa CASS. Snowy Plover. Common at Abrejos Point April 19th.

Ochthodromus wilsonius (ORD.). Wilson Plover. Quite a number of this species seen at Abrejos Point June 17th.

Aphriza virgata (GMEL.). Surf Bird. San Geronimo Island March 15th; Turtle Bay April 14th; quite common at Abrejos Point April 19th, moving in small flocks.

Arenaria interpres (LINN.). Turnstone. Quite common in flocks on San Geronimo Island March 15th; seen also at Clarion Island May 21st. It is probable that the records given here of this species are in reality those of *Arenaria morinella* (LINN.), as the skins are not at hand and it is doubtful if *Arenaria interpres* is found on the Pacific Coast.^a

Arenaria melanocephala (VIG.). Black Turnstone. Quite common in flocks on San Geronimo Island March 15th and on San Martin Island March 12th.

Hæmatopus bachmani AUD. Black Oystercatcher. Common on San Martin, San Geronimo, San Benitos, Natividad, San Roque and Ascuncion Islands, and at Turtle Bay and Abrejos Point; breeds abundantly on San Roque, Ascuncion and Natividad Islands, eggs having been taken in all stages of incubation about June 25th.

Hæmatopus frazari BREWST. Frazar Oystercatcher. Common on San Martin, San Geronimo, San Benitos, Natividad, San Roque and Ascuncion Islands, breeding plentifully on San Roque, Ascuncion and Natividad Islands, eggs taken about the 25th of June being in various stages of incubation. It is interesting to note that in the localities where *H. bachmani* and *H. frazari* both breed, several individuals were noted that were apparently intermediate in coloration between the two species, one in particular being noted that was entirely black except the white lining of the wings, visible only during flight; it is more than probable that a series could be obtained showing complete and gradual intergradation.

Zenaidura clarionensis C. H. TOWNSEND. Clarion Island Dove. Abundant on Clarion Island; one egg found about May 22nd.

Zenaidura graysoni (LAWR.). Socorro Island Dove. Socorro Island, not common; evidently breeding May 2nd.

Melopelia leucoptera (LINN.). White-winged Dove. Quite common about San Jose del Cabo April 20th, evidently breeding.

Columbigallina passerina pallascens (BAIRD). Mexican Ground Dove. Quite common about San Jose del Cabo April 20th, evidently breeding.

Columbigallina passerina socorroensis (RIDDW.). Socorro Ground Dove. Socorro Island, not common; evidently breeding May 2nd.

Cathartes aura (LINN.). Turkey Vulture. San Martin Island, March 12th, common and apparently ready to nest; Cerros Island, April 1st, a few.

Buteo borealis lucasanus RIDGW. St. Lucas Redtail. San Jose del Cabo, April 20th, not common; this subspecies has been found referable to *Buteo borealis calurus* (CASS.).^a

Buteo borealis calurus (CASS.). Western Redtail. Todos Santos Island March 10th; Guadalupe Island March 22nd; San Jose del Cabo April 20th; Socorro Island, May 2nd; not common anywhere as far as noted.

Buteo borealis socorroensis RIDGW. Socorro Redtail. Socorro Island, not common and very wild; this subspecies has been also referred to *Buteo borealis calurus* (CASS.).^a

Haliaeetus leucocephalus (LINN.). Bald Eagle. Todos Santos Island, March 10th, one pair breeding; nest inaccessible.

Falco peregrinus anatum (BONAP.). Common on San Geronimo, San Benito, Cerros and Natividad Islands, breeding; eggs taken March 13th that were fresh. The duck hawk is found breeding commonly on all islands where the Cassin auklets breed, the auklets being the principal food of the falcons.

(To be concluded.)

^a Cf. Brewster, Birds of the Cape Region of Lower California. Bull. Harv. Mus. Comp. Zool., XLI, 1902.

FROM FIELD AND STUDY

Plegadis guarana at Stockton, Cal.—Mr. Clark's interesting article on Migration of Certain Shore Birds in the April *Auk* reminds me of a remarkable flight of *Plegadis guarana* past Stockton, May 5, 6, 7, 1879, during a gale from the northwest that lasted three days. During this time from 4000 to 5000 of these birds flew north. They followed the eastern edge of the tule marsh as nearly as the strong wind would allow them to, going by sinuous flight up and down, to the right and left, with few wing strokes. I have never seen so many of these birds in any other year.

The tule marsh west of and very near Stockton at that time had a width from east to west of about twenty miles, and was a resort at all times of numerous water birds, of which few are seen since the marsh has been reclaimed and cultivated. The willows on the banks of the river and sloughs were excellent collecting grounds during the spring migration, much better than at present, owing partly, I think, to the English sparrow which has nearly possessed the country about Stockton. During this flight of *Plegadis* a great many *Dendrocygna fulva* went north over a slough about half a mile west of the route over which *Plegadis* flew, both species keeping on their respective routes during the three days' flight.—L. BELDING, *Stockton, Cal.*

Note on Food of Gray-crowned Leucosticte.—While I was crossing the Western Divide of the southern Sierra, just north of the Saw-tooth in the vicinity of Mineral King, in the latter part of June, 1904, I saw a considerable number of *Leucosticte tephrocotis*. They were running about over the snow-drifts which extended from the Pass north of Saw-tooth to Lake Columbine and were very busy catching the twelve-spotted lady-bird. I could see many little holes through the snow and wondered if the lady-birds had made them.—W. F. DEAN, *Three Rivers, Cal.*

[Additional evidence of the inadequacy of the so-called "warning marks" of lady birds!—ED.]

Helminthophila sordida at Haywards, Cal.—Two specimens in my collection, No. 19, male, Jan. 25, 1881, and No. 2087, Feb. 8, 1899, measure respectively, in millimeters; length of skin 119 and 120; wing, 59 (both); tail, 47 and 49; culmen, 11 and 12. No. 2087 was taken from a gum tree early one morning after a heavy rain storm with three *H. c. lutescens*. No. 19 is very highly colored, particularly the greenish yellow of rump and upper tail coverts. The crown patch is a deep orange green covering the whole head. The February bird is dusker, almost smoky, the crown patch being hardly distinguishable. This species may be looked for in the spring migration, particularly on wooded slopes of north hill-sides. This record is the most northern.—W. OTTO EMERSON, *Haywards, Cal.*

Scaled Partridge at Pueblo, Colorado.—While waiting for a train at Pueblo, Colorado, on July 7, 1904, Mr. Bailey and I explored the outskirts of the town. In a twenty acre park of grass and newly planted trees on the edge of the city we found Arkansas flycatchers, western wood pewees, house finches, a meadowlark, a yellow warbler, and a western chipping sparrow, while a pair of Bullock orioles were feeding grown young. Just outside the park but in a typical desert patch of tree cactus and grease brush where mockingbirds, mourning doves, lark sparrows, and nighthawks were seen, we flushed a scaled partridge (*Callipepla squamata*.) As we followed, it scudded along and then burst into short flights, when crowded circling back on set, curved wings to the place where it had first been flushed, suggesting that it might have a family in the vicinity.

In his Birds of Colorado, Prof. Cooke states that the scaled partridges which were formerly "common along the cedars on the higher arid lands back from the river . . . have been working towards the cultivated lands along the river," in the winter of 1899-1900 becoming "in the vicinity of Rocky Ford more common than the bobwhite." (Birds of Colorado, State Agr. Coll. Bull. 56, 1900, 202.) They have also been recorded from the neighborhood of Denver, so the Pueblo record merely serves to help fill in the line of their extending range.—FLORENCE MERRIAM BAILEY, *Washington, D. C.*

Notes from Cochise Co., Ariz.: Purple Gallinule.—During the second week of June, 1904, a purple gallinule (*Jonoris martinica*) alighted on the lawn of one of the residences in Tombstone, where a hose was playing. It appeared very much exhausted and drank greedily which seemed to revive it somewhat. We watched it for sometime running around on the grass and then as it showed no inclination or ability to fly we caught it. It died during the night, however. A friend here who saw the bird said he caught one in an exhausted condition at Cochise Stronghold in the Dragoon Mts., in the month of April, 1903. He kept the bird alive for several days.—FRANK C. WILLARD, *Tombstone, Ariz.*

Date of Arrival of Purple Martin at Stockton, Cal.—I have several records of the arrival of *Progne subis hesperia* in the spring at Stockton, that are earlier than at any locality on the Pacific Coast, from Cape San Lucas northward. The first male arrived on the following dates: March 1, 1879; March 6, 1885; March 5, 1886; March 9, 1900; March 7, 1903; March 2, 1905. On the last date a male and female were seen on their favorite perch near a nesting site which this pair had probably used several summers and are nesting in this summer. I first saw the species at San Jose del Cabo, April 29, 1882, and according to Mr. Brewster it did not arrive in the Cape Region of Lower California until April 29, 1887. The Cape Region is about 1200 miles south of Stockton. *Progne* probably arrives at Stockton by Tehachapi Pass or by some other interior route.—L. BELDING Stockton, Cal.

Curious Situation for Nest of Ash-throated Flycatcher.—In June, 1903, I found a pair of *Myiarchus c. cinerascens* which had taken up quarters in the stub of an old willow, some sixteen inches in diameter and three feet high, which stood at the end of a watering-trough for cattle. I would not have taken any notice of it if the bird had not flown from the nest, which was situated in the hollow stump about eighteen inches deep and was made wholly of cows' hair. The eggs were within about two days of hatching. The top of the stub was about twenty inches above the trough and the end of it had been polished to a glossy smoothness where cattle had used it as a scratching post. This did not apparently alarm the flycatchers, as I spent sometime watching them fly in and out. I pulled the stump off and it now acts as a wren's home in one of our garden pepper trees.—W. OTTO EMERSON, Haywards, Cal.

A Bird's Roost.—A tall eucalyptus tree which had grown beside my barn for the past twenty-five years had to be removed. It was cut down while I was away during the day, but on my return at dusk I was attracted by a lot of *Junco hyemalis pinosus*, *Dendroica auduboni*, and *Zonotrichia l. nuttalli* flying about the barn in great bewilderment. They were coming in from all directions and would fly to where they had been used to roosting, but their lodging house was gone. They came by fours and more, hovering in mid-air, and fluttered about in circles, then alighted on the barn which stood within three feet of the fallen tree. Many dodged down into the cypress hedge in front of the barn, keeping up short flights to the fallen tree as it lay in the road. Many were perched on the electric wires for some minutes as if meditating on being turned out of their roosting place.

This tree measured 135 feet in height and had been a land-mark to the locality, being very symmetrical in body and beautifully crowned with foliage. Every year, both summer and winter it was a great congregating place for birds. Orioles, hummers, house finches and gold-finches nested among its slender leaves; while during the winter months blue jays screamed at English sparrows, and the meadow lark sought its branches for his morning song. Even hawks and owls sought it for a vantage point. What numbers of nests this tree could name had it but words to do so!—W. OTTO EMERSON, Haywards, Cal.

Dendroica aestiva rubiginosa at Haywards, Cal.—The following is a list of *Dendroica æ. rubiginosa* in my collection. Measurements are in millimeters.

No.	Sex	Locality	Date	Length	Wing	Tail	Culmen
1030	♀	Monterey, Cal.	Sept. 28, 1896	112	59	44	10
1453	♂	Haywards, Cal.	Sept. 8, 1897	118	60	47	10
2442	♀	Haywards, Cal.	Sept. 29, 1900	116	60	48	11
2431	♂	Haywards, Cal.	Sept. 20, 1900	115	59	46	10
3110	♀	Haywards, Cal.	Oct. 8, 1901	112	59	46	11
3107	♂	Haywards, Cal.	Oct. 5, 1901	116	60	44	10
3386	♂	Haywards, Cal.	Sept. 30, 1902	112	58	41	11
1913	♀	Haywards, Cal.	Oct. 4, 1898		58	46	
1923	♀	Haywards, Cal.	Oct. 7, 1898		59	50	
2425	♀	Haywards, Cal.	Sept. 14, 1898		58	52	

The last three skins were sent to Mr. Grinnell (See CONDOR, Jan. 1901, p. 15) as being *H. celata lutescens*, the back easily misleading one as to their identity. So far I have been unable to note or take the Alaska yellow warbler in the spring migration. It is only a fall migrant in this locality, and then one must be on the alert, before sunrise, to note them as they silently move through the trees, feeding. Only three of the specimens were taken among the willows along the creek side; the others were found feeding in pepper trees. This warbler seems to return from the north following the first fall rains of September and October. By the latter part of July the young and adults of *aestiva* have all left this vicinity. *Wilsonia p. chrysocla* lingers a month or so longer, and then one will find moving through the live oaks *D. townsendi*, *D. nigrescens*, *D. auduboni*, and perhaps the rare *D. occidentalis*.—W. OTTO EMERSON, Haywards, Cal.

THE CONDOR

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NOTES AND NEWS

The attention of readers, who may not have seen the previous notice, is called to the fact that the present issue is being printed during the latter part of May. Consequently articles and notices which are sent later will not appear until September. For several reasons the September issue may be a few days late, but it is not likely to be much behind time.

"If nothing happens" the editorial sanctum will be in a tent at Camp Agassiz after June 15. To those who have been fortunate enough to spend longer or shorter periods with "the best camper of them all"—Mr. William W. Price, affectionately known as Billy to his nearer friends—further words on our part will be superfluous. But I fear there are many Cooper Club people who have not tasted the joys of Lake Tahoe, Glen Alpine, Mt. Tallac, and Desolation Valley. This region, lying just southwest of Lake Tahoe, is one of the wildest and most picturesque of the whole Sierra Nevada, and strangely enough is the most accessible. It was swept by glaciers in times past so that the mountains are wonderfully sculptured and diverse, and the forests open. Within easy walking distance of camp are a dozen peaks from eight to ten thousand feet high, and forty-four lakes—thirty, by the way, with trout. The camp itself is in a wide glacier gorge, and a huge glacier-rounded knuckle of rock, jutting from the hillside nearby, forms the "Council Rock" remembered by everyone who has visited the camp. For those who are interested in mountain sports or alpine natural history there is no region in California that can approach this. Till September 1 letters to the editor may be sent to CAMP AGASSIZ, TALLAC, CALIFORNIA, or to Palo Alto.

Mr. Grinnell writes that he will visit the higher parts of the San Bernardino Mountains this summer, and of course will be out of reach

of mail for a considerable portion of the time.

Notices of the Fourth International Ornithological Congress to be held at London, June 12 to 17, have been received. Members of the General Committee for the United States are Drs. Allen, Richmond and Stejneger and Messrs. Chapman, Elliot, and Ridgway.

Messrs. Finley and Bohlman started the latter part of May for the Klamath region of southern Oregon, where they will spend some time in photographing and studying the water birds which still teem in the marshes. In speaking of this locality a few extracts from a letter by Mr. Elmer I. Applegate of Klamath Falls may be of interest:

"Since the settlement of the Klamath country there have been some marked changes in the frequency of species, length of their visits, etc. For example, the common valley quail, formerly rare, is becoming much more abundant as the grain area of the region increases. During the winter, every cattle feed-yard supports flocks of them. They come to our yards each winter in increasing numbers where they feed with the cattle and have become almost domesticated. On the other hand, most water birds have greatly decreased in numbers. Encroachment upon their nesting and feeding grounds by stock, and wholesale slaughter by market hunters accounts for this, I think. Many wagon-loads of ducks go to the San Francisco markets during the winter months. Until the price of grebe skins became so low as to make the business unprofitable, tens of thousands of them were shipped out annually, threatening extermination. Years ago myriads of water fowl nested in the marshes about Swan Lake—ducks, terns, curlews, plovers, rails, various kind of snipe, etc. Now comparatively few nests can be found during the season. Sage hens are not nearly so numerous as formerly, and sharp-tailed grouse are rare. I have not seen a swan for several years. I don't know why there should be so few Clarke crows left. I can remember when the lower pine woods and juniper ridges were full of the noisy fellows. Pelicans, fish-hawks, cormorants, bald eagles and so on seem to be as plentiful as ever."

Our readers will remember that this was one of the early collecting grounds of the late Major Charles E. Bendire.

Mr. H. T. Clifton writes that Mr. W. Lee Chambers has left for the Bradshaw Mts., Ariz.

We have delayed our reviews so long that we inadvertently have failed to note in these columns Mr. Taylor's Standard American Egg Catalogue, Second Edition. Doubtless most of our readers are already familiar with it. Mr. Taylor has taken great pains to provide a catalogue giving the exchange values of eggs of North American birds. The list is prefaced by "Oological" by Taylor. F. M. Dille also contributes some "Ideas." "The exchange basis is worked out as consistently as possible, combining the views of many experienced collectors, and the prices, which are relative, are aimed to promote as far as possible equitable

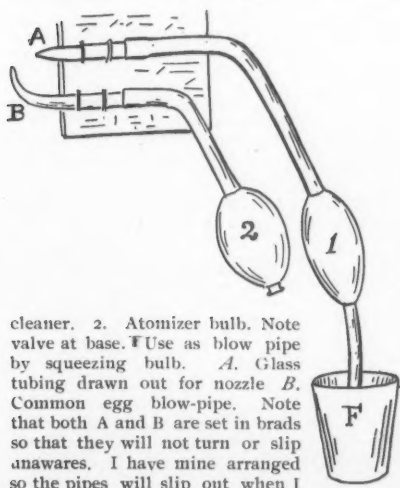
exchanges east and west, north and south. The exchange valuation is higher than cash valuation, the latter averaging perhaps one-third lower, but it is impossible to make a fixed comparison as all exchangers will agree." At the end is given a directory of persons having collections and desiring to exchange. The catalogue should prove of great practical value to persons desiring to exchange nests and eggs.

Frank H. Lattin and Ernest H. Short have recently issued "The Standard Catalogue of North American Birds' Eggs" (Fifth Edition, April 1905). This catalogue is also well known, the fourth edition having appeared in 1896. The present catalogue is printed on right hand page only, leaving the other for notes, and has a more durable cover than the last edition. We used to carry our copy in the field as a substitute for the bulky A. O. U. checklist and wore out several in this way. It is evident the present booklet will not so easily succumb to hard usage.

ERRATUM—In May issue, page 83, bottom line but one, read: "Robins have been present in about half their usual numbers during the past winter.—Dr. R. F. Rooney." This of course agrees with the other observations on the same page.

A New Egg Blower.—The following blowing and water-cleaning device, costing about \$1.50, is the best of all. By using the blower gently you can blow the smallest eggs as well as the large ones. You can get the bulbs at any drug store. Credit for the device must be given my friend Mr. Eastgate.

1. Common bulb syringe. Use as water



cleaner. 2. Atomizer bulb. Note valve at base. Use as blow pipe by squeezing bulb. A. Glass tubing drawn out for nozzle B. Common egg blow-pipe. Note that both A and B are set in brads so that they will not turn or slip awares. I have mine arranged so the pipes will slip out when I

am through with them. The board stands on an incline and is placed at such a height that I am seated during entire operation. Directly beneath A and B, I place a large open can into which the water and egg matter falls. F. Pail of soapy water.

With the above apparatus you can blow eggs six times faster than with your mouth. The beauty of it all is that after filling the egg with water by means of the cleanser (as many times as you want to) you have another instrument that blows the egg perfectly dry. All small eggs should be held away from the nozzle in blowing and cleaning. It is also a good idea to cut lining around the drill hole with scalpel or other instrument before blowing.—W. L. COLVIN, *Osawatimie, Kansas.*

We regret to announce the death of Walter E. Bryant, honorary member of the Cooper Ornithological Club, at the Waldeck Sanatorium, San Francisco, May 21. A notice of Mr. Bryant's work will appear in a future issue.

Minutes of Club Meetings

NORTHERN DIVISION

MAY.—Instead of holding the regular meeting May 6th, it was held April 29th, in the Council Room of the California Academy of Sciences, San Francisco. There being no executive officer present, H. R. Taylor was appointed chairman, and the meeting was called to order at 8:30 P. M. H. B. Kaeding was appointed secretary *pro tem*, and program was taken up. Mr. Taylor spoke on a recent visit of several Club members to the colony of great blue, and black-crowned night herons, at Redwood City, after which he discussed the action of the Fish Commission in refusing to grant permits to egg collectors. The following resolutions were introduced by Mr. Taylor, and unanimously passed by the seventeen members present:

WHEREAS, The Cooper Ornithological Club of California, organized for the study of Oology, and Ornithology in all its branches, recognizes and asserts the coordinate importance of Oology (the study of eggs and nests, and the working out of the life histories of North American birds), with systematic ornithology, as embracing the collection and comparison of bird skins in the furtherance of scientific investigation; and

WHEREAS, We further recognize that the collection and study of nests and eggs by Californian collectors, has been, and is, a prime factor in the growth and stability of this Club, while adding much to the storehouse of knowledge, and lending most materially to give this Club the high standing it now enjoys among men of science, and scientific institutions of this country and abroad, as one of the most active associations of bird students in the United States; and

WHEREAS, We regard any inhibition upon the scientific collecting of nests and eggs by our bird students as of serious detriment to scientific inquiry, and an infringement of the rights of a large number of members of this

Club, throughout California, who in consequence may be hampered or harassed in the prosecution of their favorite studies, lose interest in ornithology, and science thereby suffer loss, and this organization sacrifice a large proportion of its membership; and

WHEREAS, The knowledge of the breeding habits and life histories of our California birds, including many, even of the commoner species and subspecies, is far from complete, while the United States National Museum has in hand the large undertaking of issuing the remaining volumes of the important work carried out in part by the late Major Charles E. Bendire, "The Life Histories of North American Birds," and relies upon the nest and egg collectors of this State for much additional data, which can be supplied by our active field Oologists only; and

WHEREAS, We assert that the taking of nests and eggs in the needed series, for comparison, by students, affects the relative abundance of birds to no appreciable extent, it being well known to ornithologists that all birds, when deprived of a nest and eggs by a collector or other agency, will in a few weeks time deposit another setting to take its place, and comparatively no loss be sustained numerically by the species; and

WHEREAS, This Club lent its support to the passage of a law, at the last session of the State Legislature, for the protection of native birds, their nests and eggs, with the distinct understanding—as set forth in said bill—that collectors of nests and eggs, as well as collectors of bird skins for scientific comparison and study, should experience no difficulty in securing the necessary permits from the Fish and Game Commission of California, to enable them to continue their investigations; and

WHEREAS, It has come to the knowledge of this Club, that while permits have been, and are being issued, to collectors of bird skins, none have been issued to collectors of nests and egg, although applications have been made for the same; and that furthermore, there is now a disposition to refuse to issue any such needed permits to any collector of nests and eggs; therefore be it

RESOLVED, That the Cooper Ornithological Club views with alarm the curtailment in any degree of the rights of any student collector, whether a member of this Club or not; and be it further

RESOLVED, That the Fish and Game Commission of California, and its Chief Deputy Commissioner, Mr. Chas. A. Vogelsang, be hereby requested and urged by the Cooper Ornithological Club, after taking these facts into consideration, to issue, with as little delay as possible collecting permits to all well-intentioned bird students applying, whether collectors of bird skins only, or of nests and egg, or both, without partiality; and that said permits contain no restriction to prevent the collection of species in such series as are required for study or comparison in public or private collections; and be it finally

RESOLVED, That the Secretary be instructed to forward a copy of this preamble and resolutions forthwith to the Fish and Game Commission of California; that a copy of the same shall be spread upon the minutes of this Club and that a copy is herewith ordered published in the July-August issue of the Club's official organ, THE CONDOR, together with a brief statement of facts, and the results of this appeal and recital, and that a copy be sent to the Southern Division.

Dr. D'Evelyn made some exceedingly interesting and pointed remarks concerning the recent exhibition of the California Fish and Game Protective Association, and was followed by Mr. Emerson, who spoke on the same subject. Mr. J. S. Hunter next spoke on the economic importance of the California jay, and read a paper on the results of his investigations with this bird, after which the members present engaged in general discussion. On motion, the program was omitted, and the following

papers were read by title: "Scraps from an Owl Table," by Vernon Bailey; "The Bohemian Waxwing in Utah," by Rev. S. H. Goodwin.

The following were elected to active membership: A. E. Price, Wm. Dutcher, J. G. Tyler, Alden Sampson, and B. T. Gault. The resignations of F. J. Smith, and T. C. Zschokke were read and accepted. Adjourned to meet July 1st, 1905.

CHARLES S. THOMPSON, Secretary.

SOUTHERN DIVISION

MARCH—The meeting was held March 9, at the Hotel Arcadia, Santa Monica, and was in the nature of an open meeting, guests of the hotel having been invited to enjoy our program with us. Mr. William L. Finley exhibited his complete series of lantern slides upon the screen explaining and describing briefly and informally as the pictures were shown. At the conclusion of this treat a brief business session was held with seventeen members present and President Law presiding. Mr. Loye Holmes Miller, State Normal School, Los Angeles, was proposed for membership by Mr. Grinnell, and the following were elected members: Mr. F. C. Willard, Tombstone, Arizona; Mr. Henry W. Marsden, San Diego, Cal.; Mr. A. E. Colburn, Los Angeles, Cal., and Mr. A. Williamson, Pasadena, Cal.

The resignation of Mr. Thomas Brown, Los Angeles, Cal., was read and accepted. The following members were appointed a committee to arrange for the May outing meeting: Messrs. Lelande, O. W. Howard and Grinnell.

After extending to Mr. Finley a vote of thanks for his interesting talks before the division and to the Santa Monica members an expression of appreciation for their efforts in arranging the meeting, the club adjourned to meet April 21 in the rooms of Mr. Howard Robertson, 712 Bryson Block, Los Angeles, Cal.

H. T. CLIFTON, Secretary

APRIL—The regular meeting was held on the evening of the 20th in the rooms of Mr. Howard Robertson, 712 Bryson Block, Los Angeles, President Law presiding, twelve members and two visitors being present. Mr. G. Willett was proposed for membership, and Mr. Loye Holmes Miller, State Normal School, Los Angeles, was elected to active membership. The committee on the May Outing meeting was instructed to make final arrangements for this meeting. Talks were then given by Mr. Joseph Dixon on "A Recent Trip into San Diego County" illustrated by specimens from his collection, among them being skin of red-bellied hawk; and by Mr. Grinnell on "The Parasitic Gulls of the Pacific Coast." Mr. Grinnell showed skins of pomarine, long-tailed and parasitic jaegers, with eggs of latter two, taken in Alaska.

H. T. CLIFTON, Secretary.

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